Regular Expression Syntax

| Expression | Description | Examples and Expansions |
|--|---|--------------------------------------|
| Single character expressions | | |
| • | any single character | spi.e matches "spice", "spike", etc. |
| \char | for a nonalphanumeric char, | * matches "*" |
| | matches char literally | |
| \n | newline character | |
| \r | carriage return character | |
| \t | tab character | |
| [] | any single character listed in the brackets | |
| [] | any single character in the range | [0-9] matches "0" or "1" or "9" |
| [^] | any single character not listed | [^sS] matches one character that is |
| | | neither "s" nor "S" |
| [^] | any single character not in the range | [^A-Z] matches one character |
| | | that is not an uppercase letter |
| Anchors/Expressions which match positions | | |
| * | beginning of line | |
| \$ | end of line | |
| \b | word boundary | nt\b matches "nt" in "paint" |
| | | but not in "pants" |
| \ B | word non-boundary | all\B matches "all" in "ally" |
| | | but not in "wall" |
| Counters/Expressions which quantify previous expressions | | |
| * | zero or more of previous r.e. | a* matches "", "a", "aa", "aaa", |
| + | one or more of previous r.e. | a+ matches "a", "aa", "aaa", |
| ? | exactly one or zero of previous r.e. | colou?r matches "color" or "colour" |
| {n} | n of previous r.e. | a{4} matches "aaaa" |
| $\{n,m\}$ | from n to m of previous r.e. | |
| {n,} | at least n of previous r.e. | |
| .* | any string of characters | |
| () | grouping for precedence | |
| | and memory for backreference | |
| | matches either of neighbor r.e.s | (dog) (cat) matches "dog" or "cat" |
| Shortcuts | | |
| \d | any digit | [0-9] |
| \D | any non-digit | [^0-9] |
| \w | any alphanumeric/underscore | $[a-zA-Z0-9_{}]$ |
| \W | any non-alphanumeric | [^a-zA-Z0-9_] |
| \s | whitespace (space, tab) | [|
| \S | non-whitespace | [^u\r\t\n\f] |
| | | |